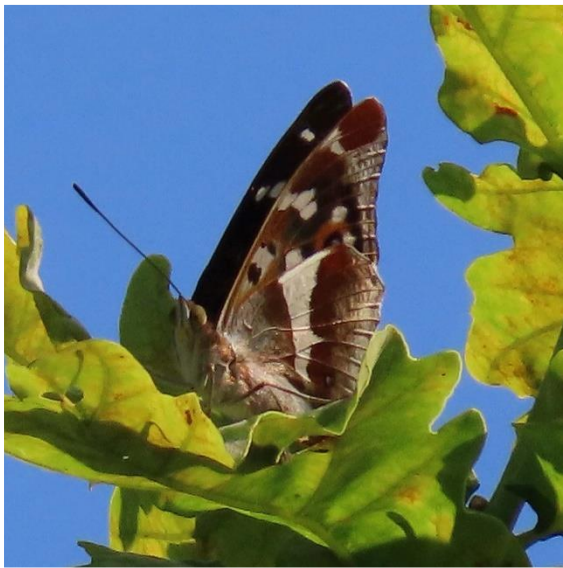


Tour Report

UK – Butterflies & Birds of Sussex

21 – 23 July 2021

Purple emperor



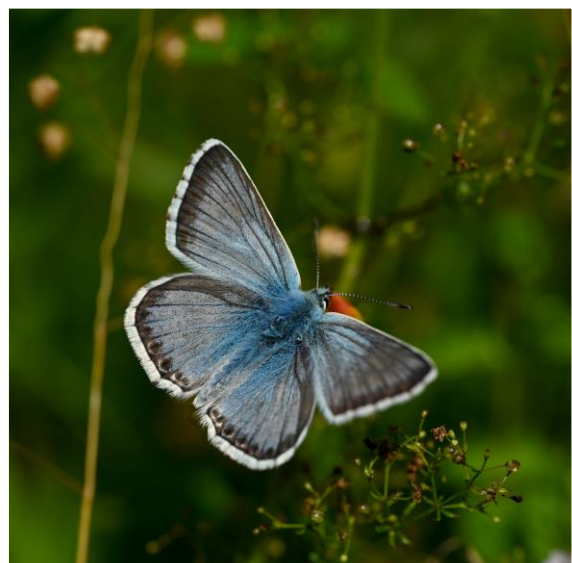
Common darter



White stork



Chalkhill blue



Compiled by Terry Goble

Images by Trevor Tipler, John Baker, Jo Barton & Terry Goble

This year had been unusual in its weather pattern and the result of this was that the emergence of butterflies had become a little unpredictable. Even so we were happy to see all the target species and had a real bonus in two purple emperors spiraling to the ground as we walked the paths of Knepp, a real highlight. We managed to visit a variety of sites including lowland heath, ancient woodlands and some flower-rich downland in search of wildlife and spend a day at Knepp, the largest 'rewilding' project in the UK. We enjoyed great views of white admiral, fritillaries and Dartford warbler and white stork, which made this a very successful and enjoyable trip.

Day 1: Wednesday 21 July 2021

Weather: Very warm and sunny afternoon

After collecting one of the group from the train station, we all met and introduced ourselves outside the Tollgate Hotel. There were a few moths from the previous night's moth trap to release, these included the large privet moth, the lackey, brown tail and common footman. They were all released into the hotel gardens. When we had released the moths and taken a few pictures we set off for Kithurst Hill. It was a short drive of about 20 minutes to get to the reserve. Kithurst Hill is a very small reserve but has been fantastically managed to produce a kaleidoscope of wildflowers and downland insects. Today's top targets were the gorgeous dark green fritillary and the chalkhill blue. The chalkhill blue is at its northern limit in the southeast of the UK, although climate changes may see it spread north. After a little searching we found both species relatively easily. The warm weather did however ensure they were very active and getting photographs was challenging. We did manage to get good views of both species and admired the subtle green tones and silver spots on the underside of the fritillary when one finally settled.

Of course, these were not the only interests in this lovely little reserve. We also spotted several other species including many marbled whites, red admirals, peacocks, meadow browns, gatekeepers, skippers and very fresh-looking painted ladies. The numbers of second brood common blue seem low in comparison to other years - hopefully they will bounce back - but a few were seen. A smart small blue was also seen, possibly a second brood butterfly, but only one was found and it is a little early for a second brood, so hopefully there will be more to come once we head into August.

Other sightings included a southern hawker dragonfly and numerous soldier beetles, mostly on the heads of umbellifers (Angelica and hogweed). We also saw some nice stands of pyramidal orchids, which are common on the downs. The profusion of yellow rattle (grass semi-parasite) and careful management has allowed wildflowers to proliferate; self-heal, agrimony, harebell, greater knapweed, marjoram, amongst many. Perhaps one of the floral highlights is the exquisite little round headed rampion, the county flower of Sussex.

It was now time to head off to our second site for a completely different wildlife encounter. We drove the short distance to Pulborough Books, which is an excellent birding reserve, particularly in the autumn and spring. However today our focus was on reptiles and although we missed out on the grass snake we did manage to find under some refuges a male (melanistic) and larger female adder. It was great to see these beautiful and increasingly rare reptiles. As we were in Pulborough it would be rude not to do a little birdwatching. We visited the Whinpenny hide and the Hanger viewpoint. At Whinpenny we watched the now near adult lapwing chicks and redshank. John, who volunteers at the reserve told us that sadly the avocet chicks I had hoped to find had been predated by corvids. We moved on to the Hanger viewpoint after a brief stop to watch dragonflies on a recently dug pond (emperor hawker and black-tailed skimmers). At the Hanger we found the adult avocets and a few black-tailed godwits. There were a few other wildfowl around mostly mallards, several Egyptian and Canada geese and a sentry of grey heron lining the banks.

It was now time to return to the hotel to get ready for dinner at 7:30pm. We arrived back at the hotel a little before seven and everyone went to get freshened up after a warm afternoon. We all sat in a group and enjoyed a buffet dinner in a relaxed atmosphere. After chatting for a while and discussing the plans for the following day we said our goodnights and retired for the day.

Day 2: Thursday 22 July 2021

Weather: The hottest day of the year at around 30°C

We all met at 8am and drove to a private meadow on near-by downland. We went there to open a moth trap that had been set the previous evening. We had a few nice moths such as small elephant, lackey, broad-barred yellow underwing, ruby tiger, and a lovely swallowtail. Around the meadow we saw a juvenile grass snake, a profusion of marbled whites and a few six-spot burnet moths on the thistle heads. On the pond there were a few broad-bodied chasers and an emperor dragonfly. It was already getting warm, so we decided to head off to Knepp where we intended to spend most of the day.

After parking up we strolled through the Knepp Centre and just prior to the start of the trails we watched the stork's nest, which still contained three very healthy adult sized chicks. One parent was sitting in the tree nearby and then flew to the nest. It had a surreal quality watching these huge birds soaring over the Knepp woodlands, a sight that has been absent for hundreds of years. The population appears to be faring well and these UK born chicks will be back and breeding in four years - they will no doubt spread along the woodland belt in Sussex.

We stopped to admire the handywork (snout work!) of the Tamworth pigs and spoke briefly about how the large herbivores have been replicated to manage the 'rewilding' of Knepp. We then walked to the 'beaver' lake to watch the great crested grebes and their 'humbug' chicks on the water. Forever on the lookout we also noted during our break that there were blue tail and azure damselflies zooming around, but not settling in the increasingly high temperatures. Both pied and grey wagtail were also seen, whilst an almost constant 'yaffling' of green woodpecker and 'check' of great spotted woodpecker could be heard. We headed off along the Purple Emperor Trail, devised by Matthew Oates. We stopped to chat to a PHD student about his work on sweat bees and he was kind enough to explain his work and show us the markings on a bee he caught.

Heading on we searched out some very likely looking spots and although the purple emperors were certainly around perhaps the hot weather was making them a little inactive. We did eventually have good views of what was probably a female gliding around the willows and looking for a likely egg laying spot. We watched her for a while until she disappeared into the willow and we then headed off along the trail. We found a new sap run oak but only red admirals appeared to be feeding. We continued to one of the tree hides overlooking a pool. We added brown hawker to our dragonfly species among the many dragonflies we could see flying around the pool. We then descended and continued along the purple emperor path but paused when the distinct call of the turtle dove could be heard purring not too far away. Sadly, we were unable to locate the dove as it stopped purring very quickly and a scan of the tree tops did not reveal the bird.

We made our way through the willow maze and tried our luck at the second butterfly hide high up in a mature oak. This proved to be very quiet and we decided to make our way back to the car and find some shade as the day was becoming very hot.

To escape the heat we headed off to the Southwater Wood complex. This was once the premier site in Sussex for purple emperor. Whilst they are still present, they are often in low densities and therefore difficult to find. We would spend the afternoon targeting views of the silver-washed fritillary (UK's largest fritillary) and

the white admiral. On route we stopped to buy our lunch and stretch our legs for a short while. We set off again and drove the short distance to an entrance to the woods. After parking up we took our lunches and walked into the woods. These are semi-ancient woodlands, which have lovely bluebell blooms in April. They host a number of woodland species and we saw one of our targets quite soon after setting out. The heat of the day ensured that they remained active and getting a good view was a challenge. In the meantime, we were enjoying several other species including our first ringlets. We sat down in a shaded woodland ride and watched the silver-washed fritillaries busily flying up and down the ride occasionally pausing as if to rest but invariably flying on. We also got our first glimpses of white admirals as they gilded much more sedately around the honeysuckle and bramble.

We walked on a circular path through the woods, pausing at a tangle of bramble bushes covered in flowers with the sun beaming down on it. Sure enough we soon had both our target species coming to nectar and giving great views, particularly of the white admiral. We headed on and arrived back at the car. The afternoon had started to cool although it was still very warm, so we headed back to Knepp with renewed vigour.

Back at Knepp we decided on a shorter walk than the one we took earlier in the day to focus on the purple emperor hotspots. We followed the White Trail to the known sap-run tree. On route we watched a fox skulk across the meadow probably trying to sneak up on one of the many rabbits in the meadow. Around some of the oaks we watched purple hairstreak zig-zagging around, there seemed to be much fewer this year and getting good views wasn't easy as they tended to fly high around the crown. We walked through the willows back to the 'Green Lane'. The cooler temperatures had tempted the purple emperors to become more active and we saw at least two flying around the oaks and even managed to find one at rest and get some excellent telescope views. After watching this male emperor chasing off all-comers we decided on a slow walk back.

Back on the 'White Trail' we were heading back to the car when amazingly two purple emperors spiralled down from near the sap tree and came to land in front of us in the grass. We watched briefly before one took off, but the other stayed for a few moments for us to enjoy, before flying off. As we neared the car park we watched a bachelor herd of fallow deer in a field. One was sporting spectacular palmated antlers, which could be seen above the high grass. We paused for one more look at the storks before grabbing a quick drink and driving back to the hotel after a long hot day.

After dinner we headed out again to the heathland created at the Pulborough Books reserve. It has been over ten years since the start of this project and despite still having work to do the RSPB have created a fine area of heathland. There were flushes of purple where the heather was taking hold on the acid soils. There was a lot of bracken that needed clearing and silver birches were threatening to take over. There were, however, nightjars! and we could hear them churring soon after arrival. We set the moth trap up, but it wasn't running for long enough to get a decent haul. We managed a grey dagger and some interesting micro moths. It was getting dark and hard to see when we first spotted a nightjar, fortunately it later flew over our heads giving us a great view despite the gloom. We also saw a bat almost as big as the nightjar, which could only have been a noctule, our largest bat. Several of them swooped by, no doubt hovering up the moths we were trying to catch! In the distance we could hear both male and female tawny owls calling across the heath.

We watched as a glorious full moon rose in the night sky, initially with a golden glow. At this point we decided to return to the hotel to get some rest. We did however have a brief stop to find glow worms. We searched the car park verges in 'stealth mode' with no lights and managed to locate the eerie glow of the female. We appreciated her bioluminescence for a while before continuing our drive back to the hotel.

Day 3: Friday 23 July 2021

The day started a little cooler with some cloud cover, but still very warm day

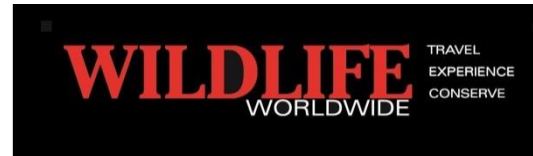
We met at 8am and released a few more moths including another privet hawk moth and a willow beauty. We set off to Iping Common, a 50 minute drive from the hotel. We made good progress and stopped at Midhurst to buy our lunch and drinks.

We continued the short drive on to Iping Common and parked in the car park, noting that there were few visitors. Our targets today were the three birds associated with heathland that we could find in the day. The first of these, the tree pipit, was seen as we began our walk. Unfortunately, they flew before anyone could get a good view of the birds and despite usually being the easiest of the three to see we were unable to locate any more. We walked up for a lunch break on the heath ridge and did some general birding and saw adult and young stonechat and a couple of yellowhammers. We also heard ravens but didn't manage to view them. After lunch, we did have much better luck with the woodlark. Earlier a small party flew up from the ground where they were feeding and after lunch we saw another small party on the ground and were able to get some 'scope views. The last on our list was thought to be the most difficult. As it turned out we had cracking views of about three different Dartford warblers, one singing from a silver birch for at least five minutes. I realised that the pair were probably on their second or third brood and so still holding territory making them easier to see.

We also saw a number of silver studded blue butterflies, which were very faded and tatty. It was a little bit of a surprise that we saw any at all. When fresh they are beautiful little blues studded with iridescent blue scales (not actually silver). We also visited the pond and were able to see several dragonflies including a four-spotted chaser and migrant hawker which were new for the trip. A smooth newt paid a brief visit as it came up for air. We virtually had the heathland to ourselves and we took in the beautiful setting with bell and cross-leaved heathers providing various shades of purple as a stunning backdrop. It was nearly time to go so we set off back to the car park. On our return we noted a trio of kestrels and on a smaller scale sand wasps looking to parasitise some unfortunate caterpillar. On return to the car park we carried on for another 15 minutes over to Steadham Common to have a quick look for roundleaf sundew. We did manage to find the diminutive, carnivorous plant and saw that one had captured a tiny fly. We took a few photographs of this unique plant and headed back. On our way to the car we saw a silver-washed fritillary flash past in the now glorious warmth of the afternoon clearly energised by the sun's rays.

We drove back to the hotel where two of the group had the delight of a swimming pool and a birthday to celebrate so we said goodbye as they headed off to their new hotel. The other group members still had about an hour before they were to depart. We drove off to a couple of nearby sites for a little bird watching. Our first trip to Tottingham was very successful as one of the group spotted a little owl on the flint wall. Our next visit was a long shot as we looked for turtle doves that had been breeding by the mill stream opposite Wood's Mill. We had to fight our way along the now overgrown trail but saw lots of wildlife including several male and female beautiful demoiselles, southern hawker, common darter and various damselflies. The turtle doves remained elusive and despite our best efforts could neither hear them nor locate them, although it was an enjoyable walk once we had negotiated the beginning of the trail. We completed the circular walk and headed back. I dropped one of the group back to the hotel and thanked him for his knowledgeable input to the tour. I then drove to Shoreham station and said farewell to the final group member as the tour came to an end.

Checklist



	Common Name	Scientific Name	Day 1	Day 2	Day 3
	BIRDS	AVES			
1	Mute swan	<i>Cygnus color</i>	✓	✓	
2	Canada goose	<i>Branta canadensis</i>	✓		
3	Egyptian goose	<i>Alopochen aegyptiaca</i>	✓		
4	Tufted duck	<i>Aythya fuligula</i>		✓	
5	Mallard	<i>Anas platyrhynchos</i>	✓	✓	
6	Common pheasant	<i>Phasianus colchicus</i>	✓	✓	✓
7	Great crested grebe	<i>Podiceps cristatus</i>		✓	
8	Rock dove	<i>Columba livia</i>	✓	✓	✓
9	Wood pigeon	<i>Columba palumbus</i>	✓	✓	✓
10	European turtle dove	<i>Streptopelia turtur</i>		H	
11	Eurasian collared dove	<i>Streptopelia decaocto</i>	✓	✓	✓
12	Common swift	<i>Apus apus</i>	✓	✓	✓
13	Common moorhen	<i>Gallinula chloropus</i>	✓	✓	✓
14	Common coot	<i>Fulica atra</i>	✓	✓	✓
15	European white stork	<i>Ciconia ciconia</i>		✓	
16	Grey heron	<i>Ardea cinerea</i>	✓	✓	
17	Great cormorant	<i>Phalacrocorax carbo</i>	✓	✓	
18	Northern lapwing	<i>Vanellus vanellus</i>	✓	✓	
19	Avocet	<i>Recurvirostra avosetta</i>	✓		
20	Black-tailed godwit	<i>Limosa limosa</i>	✓		
21	Common redshank	<i>Tringa totanus</i>	✓	✓	
22	Black-headed gull	<i>Chroicocephalus ridibundus</i>	✓	✓	✓
23	Lesser black-backed gull	<i>Larus fuscus</i>	✓	✓	✓



24	Herring gull	<i>Larus argentatus</i>	✓	✓	✓
25	Common tern	<i>Sterna hirundo</i>		✓	
26	Red kite	<i>Milvus milvus</i>			✓
27	Eurasian buzzard	<i>Buteo buteo</i>	✓	✓	✓
28	Green woodpecker	<i>Picus viridis</i>		✓	✓
29	Great spotted woodpecker	<i>Dendrocopos major</i>	✓	✓	✓
30	Common kestrel	<i>Falco tinnunculus</i>	✓	✓	✓
31	Sparrowhawk	<i>Accipter nisus</i>			✓
32	Little owl	<i>Athene noctua</i>			✓
33	Eurasian jay	<i>Garrulus glandarius</i>		✓	
34	Eurasian magpie	<i>Pica pica</i>	✓	✓	✓
35	Eurasian jackdaw	<i>Corvus monedula</i>	✓	✓	✓
36	Rook	<i>Corvus frugilegus</i>	✓	✓	✓
37	Carrion crow	<i>Corvus corone</i>	✓	✓	✓
38	Dunnock	<i>Prunella modularis</i>	✓	✓	
39	House sparrow	<i>Passer domesticus</i>	✓	✓	✓
40	Grey wagtail	<i>Motacilla cinerea</i>		✓	
41	Pied wagtail	<i>Motacilla alba</i>	✓		
42	Common chaffinch	<i>Fringilla coelebs</i>	✓	✓	✓
43	European greenfinch	<i>Chloris chloris</i>	✓		
44	Common linnet	<i>Linaria cannabina</i>	✓	✓	✓
45	Bull finch	<i>Pyrrhula pyrrhula</i>		✓	✓
46	European goldfinch	<i>Carduelis carduelis</i>	✓	✓	✓
47	Blue tit	<i>Cyanistes caeruleus</i>	✓	✓	✓
48	Great tit	<i>Parus major</i>	✓	✓	✓
49	Eurasian skylark	<i>Alauda arvensis</i>	✓	✓	✓
50	Woodlark	<i>Alauda arborea</i>			✓
51	Northern house martin	<i>Delichon urbicum</i>		✓	
52	Barn swallow	<i>Hirundo rustica</i>	✓	✓	✓

53	Dartford warbler	<i>Sylvia undata</i>			✓
54	Common chiffchaff	<i>Phylloscopus collybita</i>	H	✓	✓
55	Eurasian blackcap	<i>Sylvia atricapilla</i>	H	H	
56	Common whitethroat	<i>Curruca communis</i>	✓	✓	✓
57	Eurasian wren	<i>Troglodytes troglodytes</i>	✓	✓	✓
58	Common starling	<i>Sturnus vulgaris</i>	✓	✓	✓
59	European robin	<i>Erithacus rubecula</i>	✓	✓	✓
60	Song thrush	<i>Turdus philomelos</i>	✓	✓	✓
61	Eurasian blackbird	<i>Turdus merula</i>	✓	✓	✓
	BUTTERFLIES	RHOPALOCERA			
1	Comma	<i>Polyommatus c-album</i>		✓	✓
2	Brimstone	<i>Gonepteryx rhamni</i>	✓		
3	Chalkhill blue	<i>Polyommatus coridon</i>	✓		
4	Common blue	<i>Polyommatus icarus</i>	✓		
5	Small blue	<i>Cupido minimus</i>	✓		
6	Silver-studded blue	<i>Plebejus argus</i>			✓
7	Small skipper	<i>Thymelicus sylvestris</i>	✓	✓	✓
8	Essex skipper	<i>Thymelicus lineola</i>	✓		✓
9	Large skipper	<i>Ochlodes sylvanus</i>	✓	✓	✓
10	Large white	<i>Pieris brassicae</i>	✓	✓	✓
11	Meadow brown	<i>Maniola jurtina</i>	✓	✓	✓
12	Gatekeeper	<i>Pyronia tithonus</i>	✓	✓	✓
13	Marbled white	<i>Melanargia galathea</i>	✓	✓	✓
14	Peacock	<i>Inachis io</i>	✓	✓	✓
15	Red admiral	<i>Vanessa atalanta</i>	✓	✓	✓
16	Purple emperor	<i>Apatura iris</i>		✓	
17	Ringlet	<i>Aphantopus hyperantus</i>			✓
18	Dark green fritillary	<i>Argynnis aglaja</i>	✓		
19	Silver-washed fritillary	<i>Argynnis paphia</i>		✓	✓

20	Painted lady	<i>Vanessa cardui</i>	✓	✓	
21	Purple hairstreak	<i>Neozephyrus quercus</i>		✓	✓
22	Small white	<i>Pieris rapae</i>	✓	✓	✓
23	Clouded yellow				✓
24	Speckled wood	<i>Pararge aegeria</i>		✓	✓
25	White admiral	<i>Satyrrium w-album</i>		✓	
	MOTHS (MACROS)	LEPIDOPTERA			
	GEOMETRID				
1	Barred straw	<i>Eulithis pyraliata</i>		✓	✓
2	Shaded broad bar	<i>Scotopteryx chenopodiata</i>			✓
3	Peppered moth	<i>Biston betularia</i>		✓	
4	Lackey	<i>Malacosoma neustria</i>	✓	✓	
5	Small elephant hawkmoth	<i>Deilephila porcellus</i>	✓	✓	
6	Privet Hawkmoth	<i>Sphinx ligustri</i>	✓	✓	
7	Six-spot burnet	<i>Zygaena filipendulae</i>			
8	Cinnabar	<i>Tyria jacobaeae</i>			✓
9	Brown-tail	<i>Euproctis chrysorrhoea</i>	✓	✓	
10	Common footman	<i>Eilema lurideola</i>		✓	
11	Scarce footman	<i>Eilema complana</i>		✓	
	NOCTUIDAE				
1	Heart and dart	<i>Agrotis exclamationis</i>		✓	
2	Common rustic	<i>Mesapamea secalis</i>		✓	
3	Dark arches	<i>Apamea monoglypha</i>	✓	✓	
4	Grey Dagger/Dark Dagger	<i>Acronicta auricoma/tridens</i>		✓	
5	Lesser Broad-bordered yellow underwing	<i>Noctua janthe</i>	✓	✓	
6	Silver 'Y'	<i>Autographa gamma</i>		✓	
	MOTHS (MICROS)				
1	Marsh Dowd	<i>Blastobasis rebeli</i>		✓	

2	No common name	<i>Blastobasis adustella</i>		✓	
3	Grass veneer	<i>Crambus sp</i>	✓	✓	✓
	DRAGONFLIES	ANISOPTERA			
1	Beautiful demoiselle	<i>Calopteryx virgo</i>		✓	✓
2	Banded demoiselle	<i>Calopteryx splendens</i>		✓	
3	Azure damselfly	<i>Coenagrion puella</i>		✓	✓
4	Common blue damselfly	<i>Enallagma cyathigerum</i>		✓	✓
5	Blue-tailed damselfly	<i>Ischnura elegans</i>		✓	
6	Large red damselfly	<i>Pyrrhosoma nymphula</i>		✓	
7	Brown Hawker	<i>Aesha grandis</i>		✓	
8	Migrant hawker	<i>Aesha mixta</i>		✓	✓
9	Southern hawker	<i>Aeshna cyanea</i>		✓	
10	Emperor Hawker	<i>Anax imperator</i>		✓	✓
11	Common darter	<i>Sympetrum striolatum</i>	✓	✓	✓
12	Black-tailed skimmer	<i>Orthetrum cancellatum</i>	✓	✓	
13	Broad-bodied chaser	<i>Libellula spona</i>		✓	
	MAMMALS	MAMMILIA			
1	Noctule bat	<i>Nyctalus noctula</i>		✓	
2	European rabbit	<i>Oryctolagus cuniculus</i>	✓	✓	✓
3	Red Fox	<i>Vulpus vulpus</i>		✓	
4	Fallow deer	<i>Dama dama</i>		✓	
	REPTILES AND AMPHIBIANS	REPTILIA AND AMPHIBIA			
1	Grass snake	<i>Natrix natrix</i>		✓	
2	European adder	<i>Vipera berus</i>	✓		
3	Viparious lizard	<i>Lacerta zootopca vivipara</i>			✓
	PLANTS	PLANTAE			
1	Cross-leaved heather	<i>Erica tetralix</i>			✓
2	Bell heather	<i>Erica cinerea</i>			✓
3	Common Ling	<i>Calluna vulgaris</i>			✓

4	Roundleaf sundew	<i>Drosera rotundifolia</i>			✓
5	Hog weed	<i>Heracleum mantegazzianum</i>	✓	✓	✓
6	Angelica	<i>Angelica sylvestris</i>	✓	✓	✓
7	Self heal	<i>Prunella vulgaris</i>	✓	✓	✓
8	Common knapweed	<i>Centaurea nigra</i>	✓	✓	✓
9	Greater knapweed	<i>Centaurea scabiosa</i>	✓	✓	✓
10	Common ragwort	<i>Jacobaea vulgaris</i>	✓	✓	✓
11	Rough hawkbit	<i>Leontodon hispidus</i>	✓	✓	✓
12	Bird's foot trefoil	<i>Lotus corniculatus</i>	✓	✓	
13	Horseshoe vetch	<i>Hippocrepis comosa</i>	✓		
14	Kidney vetch	<i>Anthyllis vulneraria</i>	✓		
15	Ladies bedstraw	<i>Galium verum</i>	✓	✓	
16	Scarlet pimpernel	<i>Lysimachia arvensis</i>	✓	✓	
17	Agrimony	<i>Agrimonia eupatoria</i>	✓	✓	✓
18	Yarrow	<i>Achillea millefolium</i>	✓	✓	✓
19	Meadow sweet	<i>Filipendula ulmaria</i>	✓		
20	Pyramidal orchid	<i>Anacamptis pyramidalis</i>	✓		